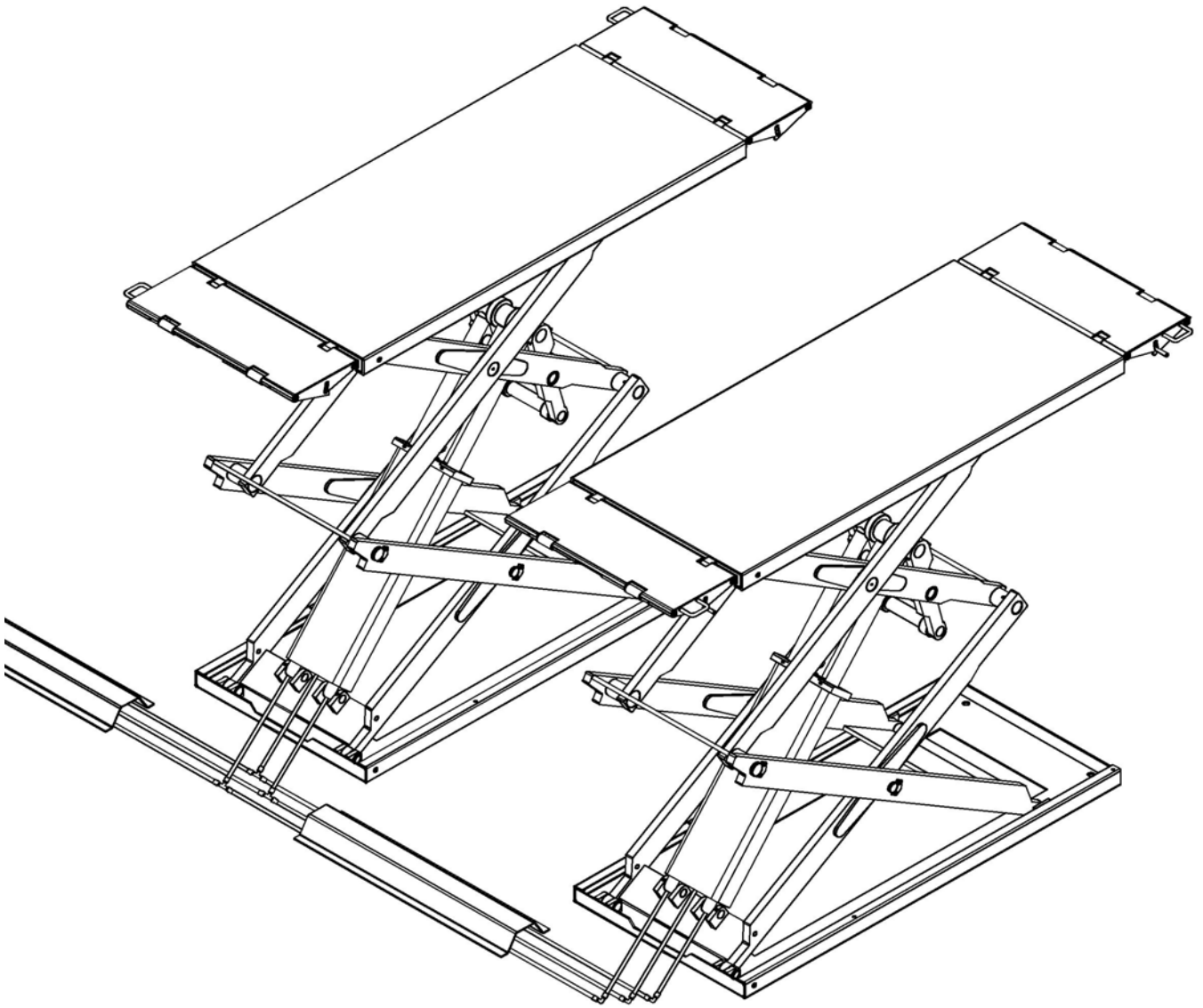


QJYJ30-CB Scissor Vehicle Lift Operation Manual



Instructions are part of the product, please place where you can always find for easy reference. Read the instructions carefully before the start of installation, operation and Tongrun lift and its distributors are not liable for any accidents caused by misuse, abuse, alterations on parts, which not authorized by them.

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IMPORTANT SAFETY INSTRUCTIONS

1.1 Important notices

- The lift is specially designed for lifting vehicles that weighs within its outmost lifting capacity. Users are not allowed to use it for any other purposes. Otherwise, Tongrun lift, as well as our sales agency, will not bear any responsibility for accidents or damages of the lift.
- Tongrun lift provide one-year's quality warranty for the whole machine. Personal or property damage directly or indirectly caused by improper installation or any abuse, the company does not undertake any responsibility.
- Please read this manual carefully before installation and operation, to avoid any property damage, or life injury caused by improper operation.
- Without our professional advice, users are not permitted to make any modification to the control unit or whatever mechanical unit.

1.2 Qualified personnel

- 1.2.1 Only these qualified staff, who have been properly trained, can operate the lift.
- 1.2.2 Electrical connection must be done by a competent electrician.
- 1.2.3 People who are not concerned are not allowed in the lifting area.

1.3 Danger notices

- 1.3.1 Do not install the lift on any asphalt surface.
- 1.3.2 Read and understand all safety warnings before operating the lift.
- 1.3.3 Do not leave the controls while the lift is still in motion.
- 1.3.4 Keep hands and feet away from any moving parts. Keep feet clear of the lift when lowering.
- 1.3.5 Only these properly trained personnel can operate the lift.
- 1.3.6 Do not wear unfit clothes such as large clothes with flounces, ties, etc, which could be caught by moving parts of the lift.
- 1.3.7 To prevent evitable incidents, surrounding areas of the lift must be tidy and with nothing unconcerned.
- 1.3.8 The lift is simply designed to lift the entire body of vehicles, with its maximum weight within the lifting capacity.
- 1.3.9 Always insure the safety latches are engaged before any attempt to work near or under the vehicle. Never remove safety related components from the lift. Do not use if safety related components are damaged or missing.
- 1.3.10 Do not rock the vehicle while on the lift or remove any heavy component from vehicle that may cause excessive weight shift.
- 1.3.11 Check at any time the parts of the lift to ensure the agility of moving parts and the performance of synchronization. Ensure regular maintenance and if anything abnormal occurs, stop using the lift immediately and contact our dealers for help.
- 1.3.12 Lower the lift to its lowest position and do remember to cut off the power source when service finishes.
- 1.3.13 Do not modify any parts of the lift without manufacturer's advice.
- 1.3.14 If the lift is going to be left unused for a long time, users are required to:
 - a. Disconnect the power source;
 - b. Lubricate the moving parts with hydraulic oil;
 - c. Empty the oil tank.

Warning: lifting machine is of high risk products. Improper installation and operation, or modification on the parts without authorization, are likely to cause damage to the operator, even resulting in death. Read the instructions carefully and strictly operate the lift according to the requirements.

1.4 Warning signs

safety notes!	safety notes!	safety notes!	notes!	notes!
				
Read operating and safety manual before using lift.	Proper maintenance and inspection is necessary for safe operation.	Do not operation a damaged lift.	Lift to be used by trained operator only!	Authorized personnel only in lift area.
notes!	notes!	warning!	warning!	warning!
				
Always use safety stands when removing or installing heavy components.	Please use the lift recommended by the vehicle manufacture.	Without the permission of the manufacturer or not following the requirement of the manual , any changes in the machine part and in the usage scope is strictly forbidden.	Remain clear of lift when lowering vehicle.	Keep hands and feet clear of X and link of lift while raising and lowering.
warning!	warning!	warning!	warning!	warning!
				
Avoid excessive rocking of vehicle while on lift.	Keep the installation area free from obstacle, grease, machine oil, garbage and other impurities, keep cleaning.	Assistant support or pole under vehicle is forbidden while lowering.	Severe deviation of the center of gravity, leading to unstable vehicle inclining and falling out.	Position only one side of the vehicle is forbidden.
warning!	warning!	warning!	warning!	
				
Keep feet clear of lift while lowering!	Clear area if vehicle is in danger of falling.	The vehicle should be parallel with the table of lift.	Look out the voltage.	

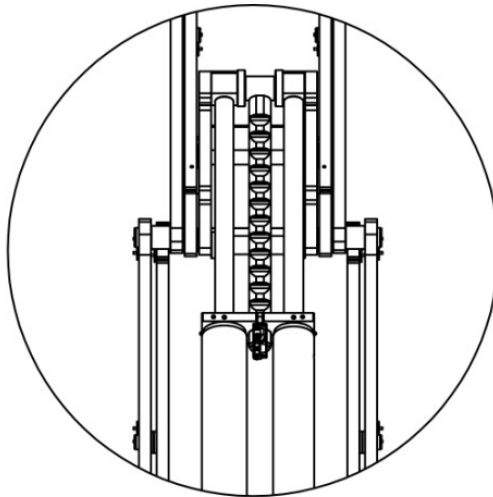
OVERVIEW OF THE LIFT

2.1 General descriptions

QJYJ30—CB is four-cylinder scissors lift, designed for the surface installation, easy to install. Apply to all kinds of small and medium-sized vehicles weighted under 3.0 t, it serves for auto repair and maintenance; it also can be used in the production line, transition of goods on automatic line with different height, material handing online and offline.

Its four-cylinder structure makes the lowest 110mm clearance from ground come true. Its platform extension deign may not only be used as a ramp, but also can serve as an extended part of the platform for much longer vehicles. Besides, designs like, 24V working voltage of control box, alarming buzzer, pneumatic safety lock, etc have fully considered your personal security.

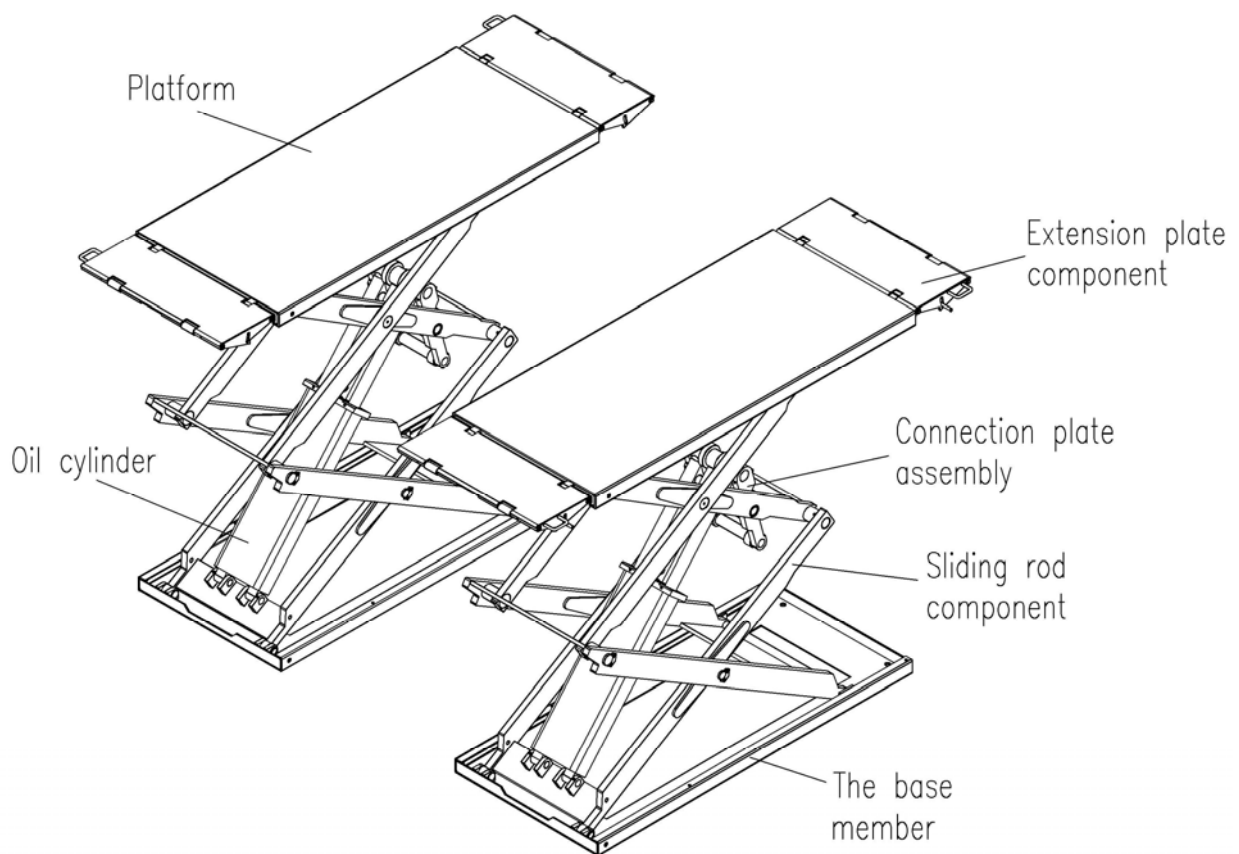
Safety structure:



2.2 Technical data

Model	Lifting capacity	Lifting time	Fall time	Lifting height	Total weight	Table space(adjustable) Recommended	Power supply
QJYJ30-CB	3000KG	<55s	<40s	1850mm	895KG	800mm	220V,Single-phase 380V,three-phase

2.3 Construction of the lift



INSTALLATION INSTRUCTIONS

3.1 Preparations before installation

3.1.1 Tools and equipments needed

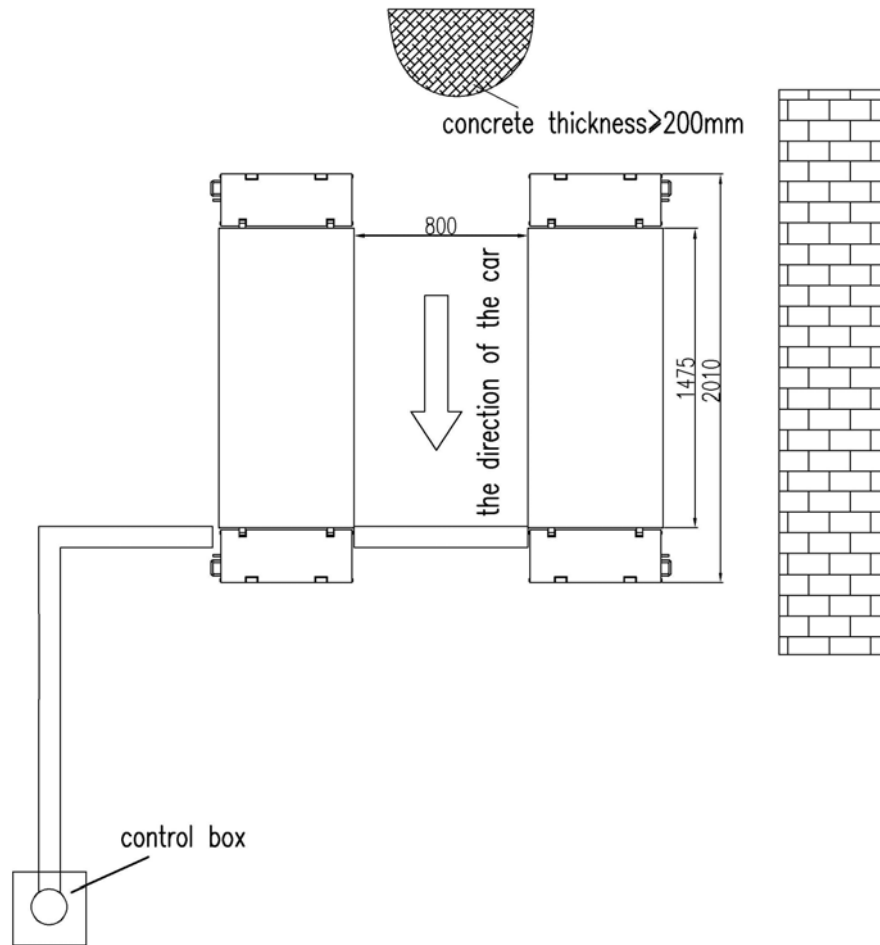
- Electrical drill
- Open wrenches
- Screw drivers
- Hammer

3.1.2 List for parts checking --- Annex 1(Packing list)

Open the package, refer to the attachment 1 (packing list), check all parts, if any parts missing happen, please contact the dealer or manufacturer immediately. In this case, you should not continue installation. Otherwise Tongrun lift and distributors are not liable.

3.1.3 Ground conditions

The lift should be fixed on a smooth and solid concrete ground with its strength more than 3000psi, tolerance of flatness less than 5mm and minimum thickness of 200mm. In addition, newly built concrete ground must undergo more than 28days' cure and reinforcement.

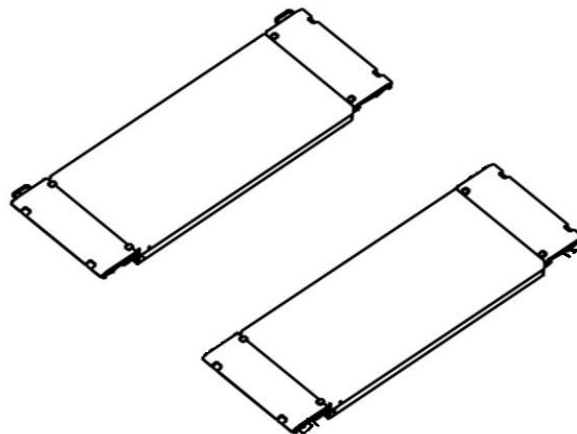


3.2 Precautions for installation

- 3.2.1 Joints of oil hose must be firmly connected in order to avoid leakage.
- 3.2.2 All bolts should be firmly screwed up.
- 3.2.3 Do not place any vehicle on the lift in the case of trial running.

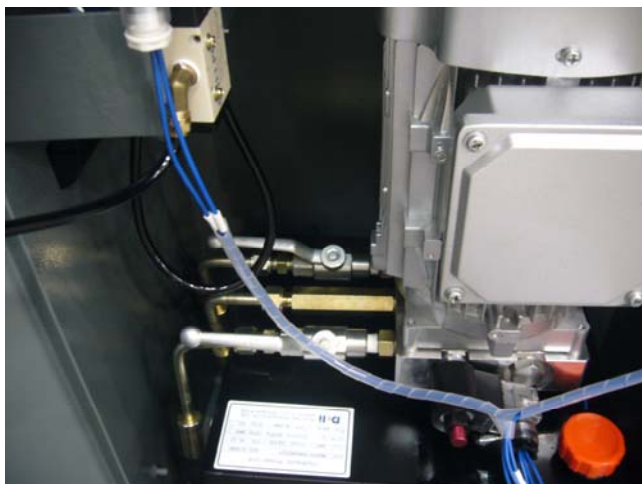
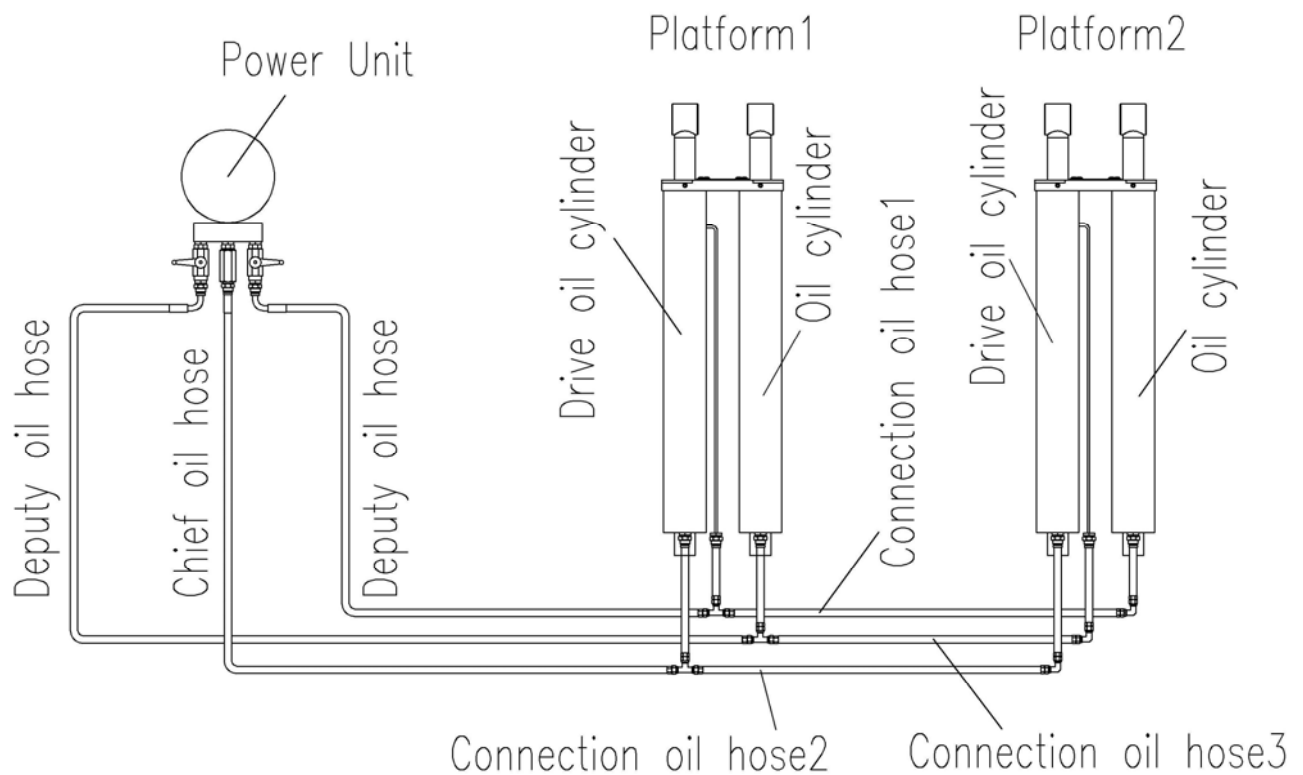
3.3 Installation

Step1: Dismantle all of the outer packing, to move the platform, put them in previous concrete ground, keep space of 800mm between two platforms horizontally, as shown in the figure, in the process of dismounting, please be careful not to make oil tube bent, so as to avoid distortion.



Step2: Connect oil hoses (This step is extremely important, so do refer to the diagram for of oil hose connection and understand the following instructions before proceeding)

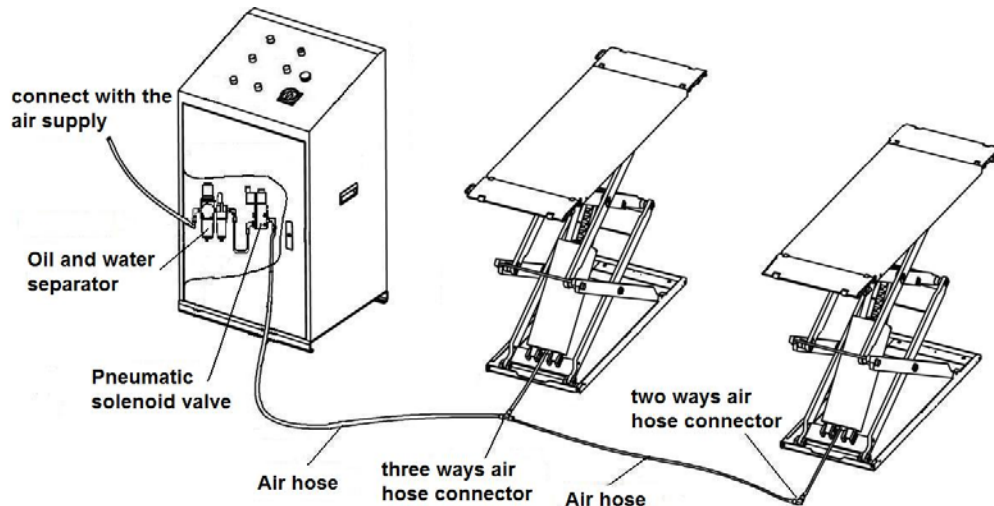
- A、 make sure there is nothing obstructed or dirty left in the hose.
- B、 Installers have to distinguish where the chief oil hose to be connected by referring to the below pictures and have the chief hose connected.
- C、 See the left picture followed by two branches of the chief oil hose are going to be respectively connected to the tie-ins for chief oil hose reserved on the hydraulic block and the other scissor. Similarly, branches of the other two leveling hoses are going to be connected to the tie-ins reserved for leveling hoses.
- D、 Check if all connections are tightened.



Chief oil hose is in the middle,
Deputy oil hose is on both sides.

Step3: Connect the electrical and pneumatic system.

Connect the external power supply plugs according to electrical schematic diagram, as Annex 4 shown and then connect an external high pressure gas source (pneumatic 0.6~0.8kg/cm²) to the oil-water separator inlet of pumping station, and then connect oil pipe of safety lock to the gas port of pneumatic solenoid valve of pumping station.



Step4: Fill with hydraulic oil.

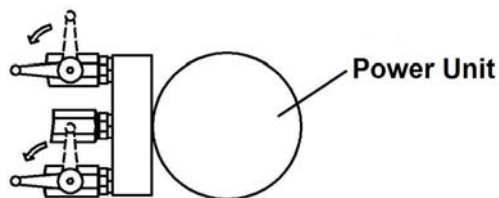
Pour into the oil tank with 16 liters of anti-grinding oil. Level of the oil shall be 10mm to 40mm away from the top of the tank. (Users can measure it by the feeler attached on the lid).

Step5: Leveling

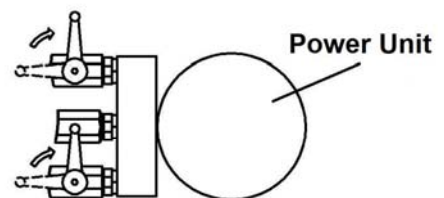
Before leveling, make sure the oil hoses are correctly connected. Otherwise, oil cylinders may not work synchronously or could be damaged. In addition, operators need to know clear which leveling valve controls which platform. This could be judged by the way that the oil hose was connected or by trial raising or lowering.

Manual leveling

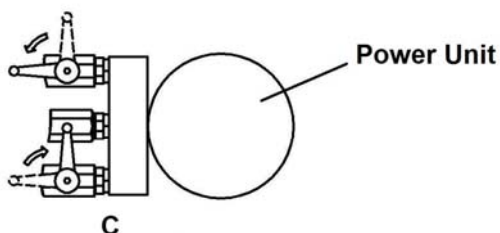
Open one of the leveling valves and press the UP button to supplement oil to the oil hose connected. Close the valve to stop adding oil. In normal working condition, both leveling valves are closed. If both valves are open, two platforms of the lift can still rise but will not move upwards synchronously.



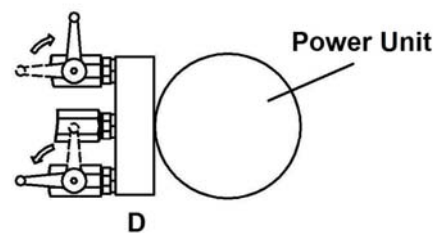
A.Both valves open



B.Both valves closed: Normal working



C



D

One valve open, the other closed:leveling condition

A1. Open both leveling valves and press the UP button to have both platforms raised to the highest positions. Repeat this step for two or three times. (Take care that this step could be time consuming, because there's air in the cylinders and no load on the platforms.)

A2. Close both leveling valves as fig B. Press the UP button to see if both platforms rise synchronously. (Normally, till now the platforms may not rise synchronously.)

A3. If not work synchronously, one platform may rise faster than the other. Users should first judge which leveling valve controls which platform and then open the valve that controls the slower-rising platform to supplement oil into its oil hose. Press the UP button to make both platforms rise to the same height. (The other valve here must be closed.)

A4. Close both leveling valves. Press DOWN button to have both platforms lowered to the lowest position.

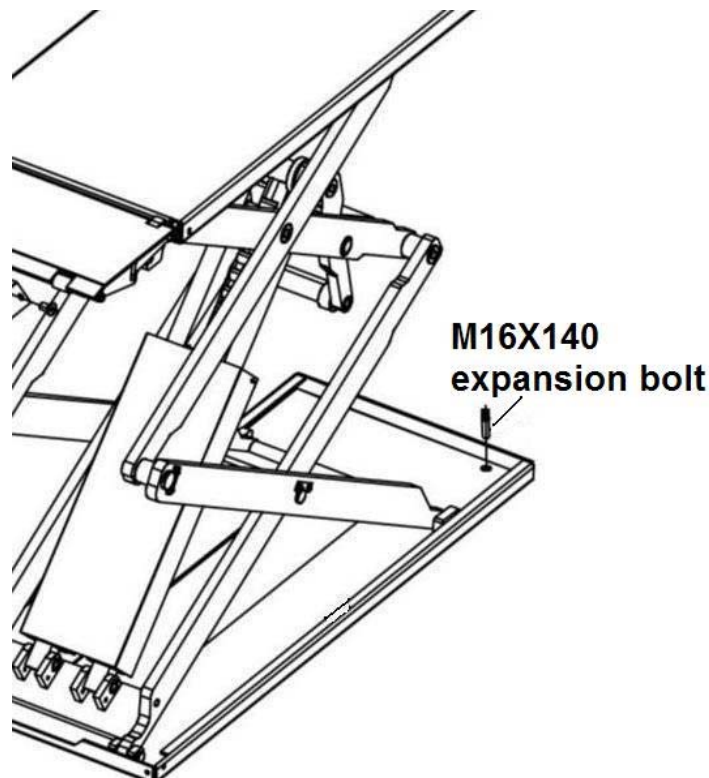
A5. If they do not lower synchronously, open the valve that controls the slower-lowering platform and press DOWN button to have them lowered to the lowest position and then close the leveling valve.

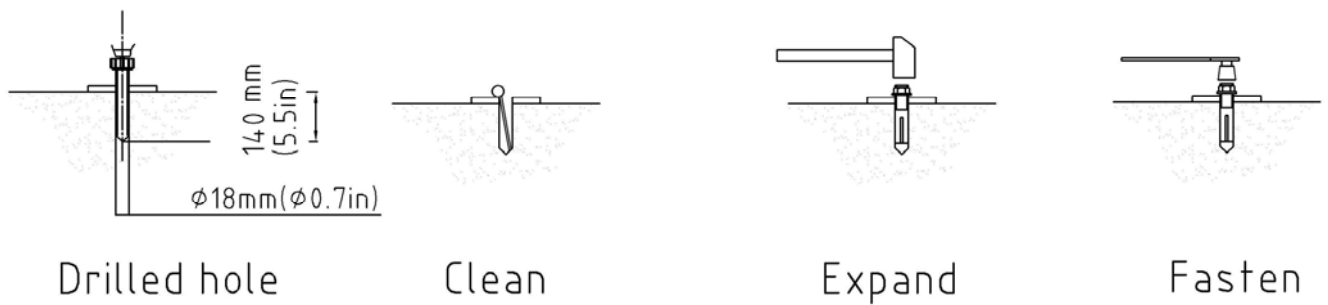
A6. After both leveling valves having been closed, press the UP button to check if both platforms rise synchronously.

A7. Repeat doing A5 and A6 until synchronization achieved.

Step6: Fix expansion bolts.

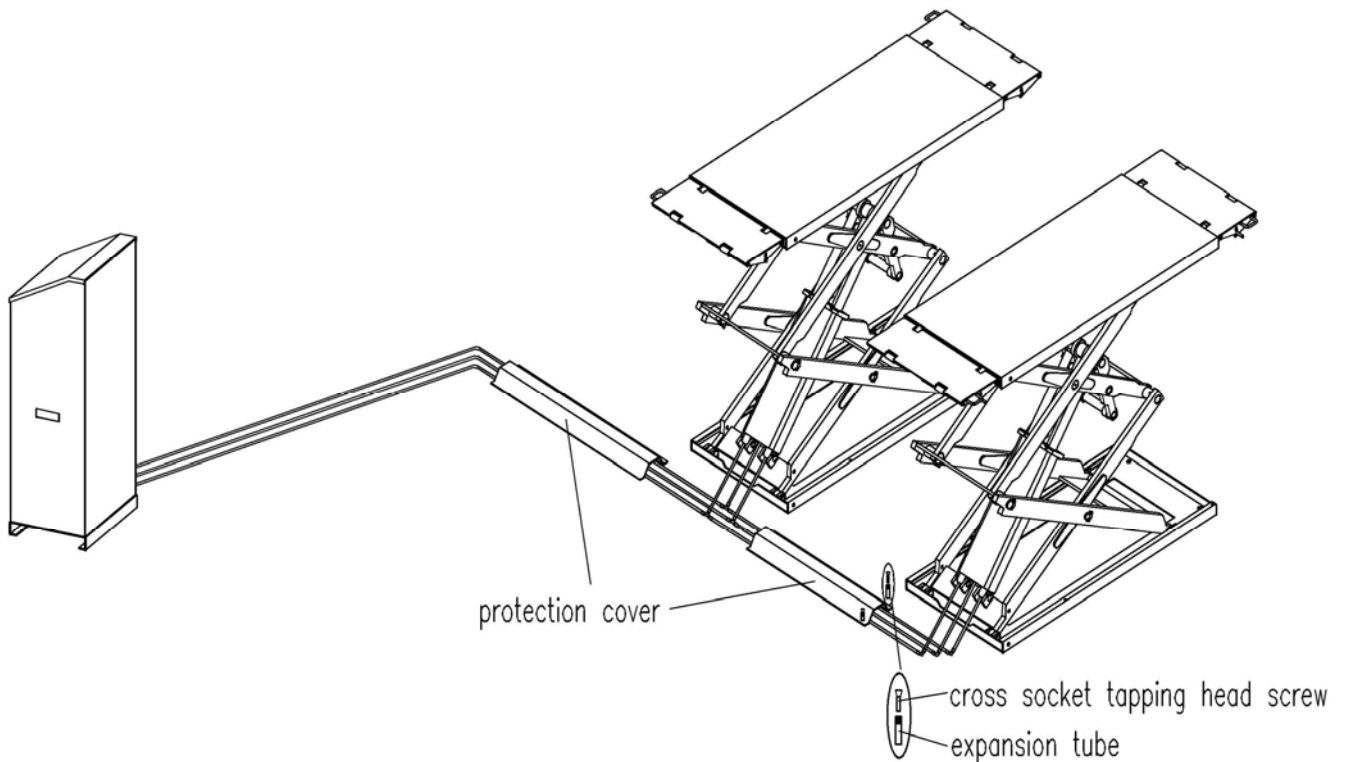
1. Drill anchor holes for expansion bolts on the ground with an electrical drill. Make sure to drill vertically.
2. Remove thoroughly the debris and dust in holes and ascertain that the posts stay right upon the circle previously marked by chalk.
3. Hammer in and secure expansion bolts.





Step7: Install oil hose protection covers.

Put two guard plates according to below diagram, drilling holes for expansion tube using electrical drill in the Location of the prepared for guard plate, sweep the dust, put expansion tube under the guard plate, then tighten the screw from top of guard plate.



3.4 After the installation, check the following items:

- platforms be leveled
- oil tubing be connected properly
- electrical parts be connected correctly
- no oil leaking in the valve of the pump station

OPERATION INSTRUCTIONS

4.1 Precautions

4.1.1 Check all the joints of oil hose. Only when there is no leakage, the lift can start work.

4.1.2 The lift, if its safety device malfunctions, shall not be used.

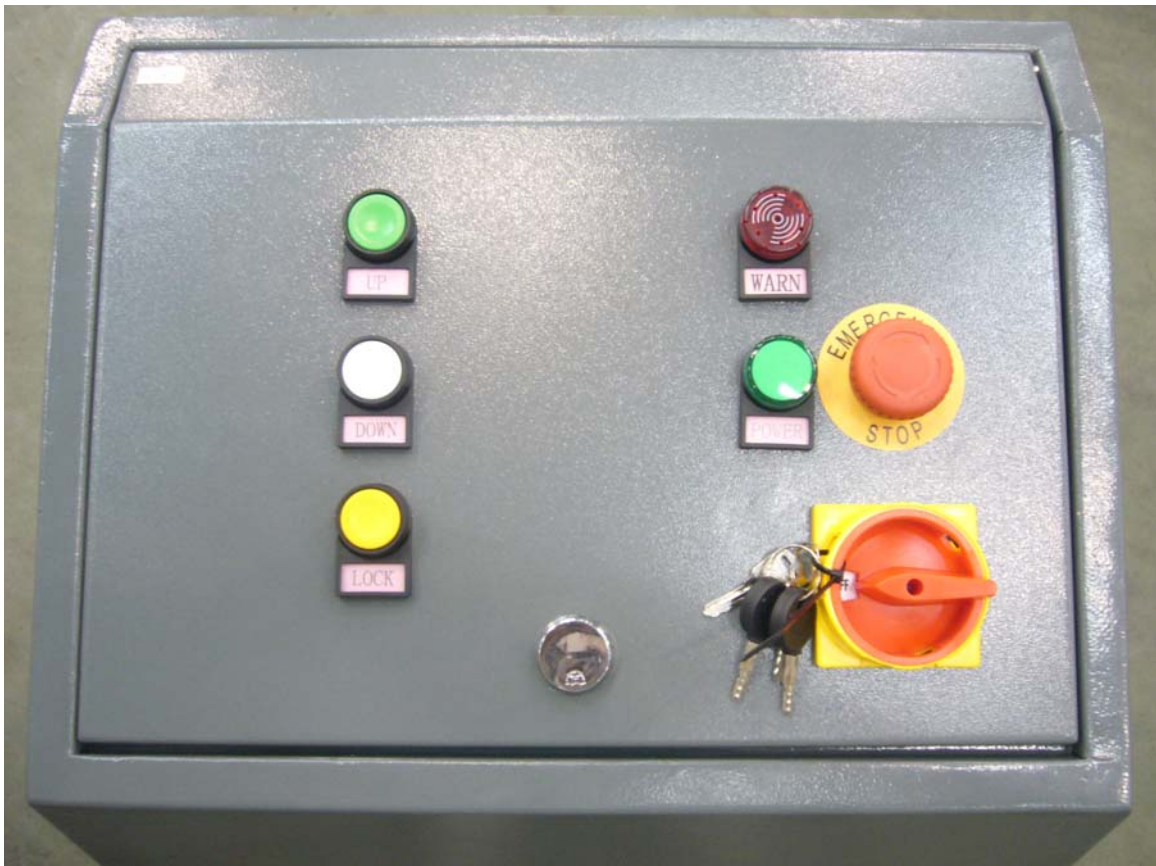
4.1.3 The machine shall not lift or lower an automobile if its center of gravity is not positioned midway of the rising platforms.

4.1.4 Operators and other personnel concerned should stand in a safety area during lifting and lowering process.

4.1.5 When platforms being raised to the desired height, switch off the power at once to prevent any wrong operation done by unconcerned people.

4.1.6 Make sure the safety locks of the lift are engaged before start working under the vehicle and no people under the vehicle during lifting and lowering process.

4.2 Descriptions of control box



4.3 Operation instructions

Raise the lift:

1. Make sure that you have read and understood the operation manual before operation.
2. Drive and park the vehicle midway between two platforms.
3. Place the four rubber pads under the prop-points of the vehicle and ensure car's gravity have fallen on the rubber pads.
4. Press the UP button on the control box until rubber pads have touched the prop-points of vehicle
5. Keep on pressing the UP button to lift the vehicle a bit higher from the ground and check again if the vehicle is in a safe position.
6. Having raised the vehicle to the required height, press the "lock" button to make the mechanical safety lock be engaged and then press the "emergency stop" and check again the stability of the vehicle before performing maintenance or repair work.

Lower the lift:

1. Open the emergency stop switch.
2. Press and hold DOWN button, the platform will raise a certain height, in order to open the insurance part, then the platform begin to descend.
3. The machine is equipped with safety warning device, it's normal to hear alarm voice throughout the descending process.
4. The falling process goes from fast speed at the beginning to slow speed later, when the height off the ground comes nearly 400mm, the speed of decline becomes obviously slow. The lift is designed and aims to enhance security
5. Drive away the car when platform be lowed to the minimum height.

Note:

1. It is normal to find that two platforms may work with slight non-Synchronization after a period of using. Serious consequences will happen if you do not level it in time, and it may cause damage on operator and even death. So it is very important that you should always pay attention to the Synchronization of lift.

2. You should avoid any over travel of Platform when it rises to the highest, thereby reducing the life of cylinder, and increases the risk.

3. In the course of using, you should cultivate the habit of keep an eye on relationship between relative position of axis parts, pay attention to any Axial displacement of them, Once you have found this situation, please do not hesitate to contact the manufacturer, Get professional help and service, reduce unnecessary losses.

TROUBLE SHOOTING

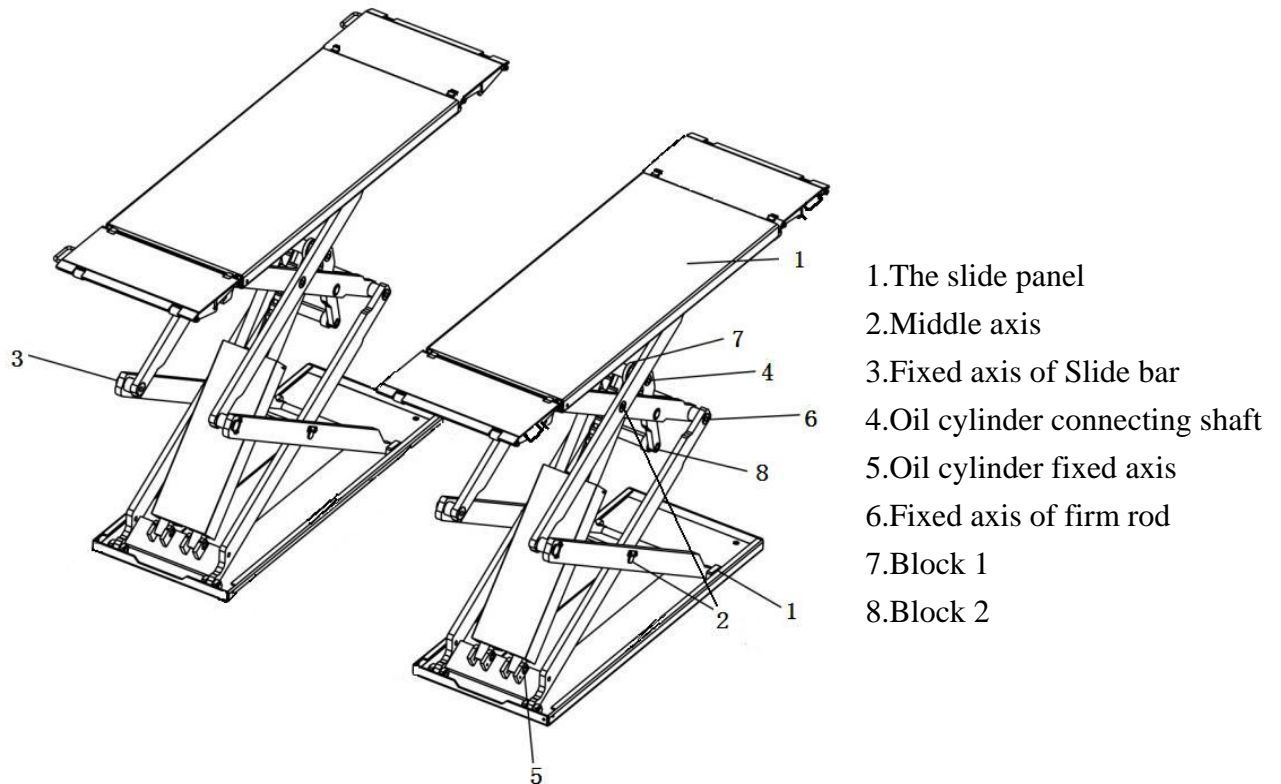
ATTENTION: If the trouble could not be fixed by yourself, please do not hesitate to contact us for help .We will offer our service at the earliest time we can. By the way, your troubles will be judged and solved much faster if you could provide us more details or pictures of the trouble.

TROUBLES	CAUSE	SOLUTION
Motor does not run and will not raise	The motor is burnt	Replace it
	The wire connection is loose	Check and make a good connection
	Fuse is burned	Replace it
Motor runs but will not raise	The motor run reversely	Check the wire connection
	Oil level is too low	Add oil
	The relief valve is damaged	Fix or replace it
	The oil hose became loose or dropped off	Tighten it
Raising too slow	Oil level is too low	Add oil
	The overflow valve is not adjusted to the right position	Adjust it
	The lift is overloaded	Check the weight of the vehicle
	The oil filter is jammed	Clean or replace it
	The seal of the cylinder is abraded	Replace the seal
Platforms go down slowly after being raised	The oil hose leaks	Check or replace it
	Electrical unloading valve leaks	Clean or replace it
	The single valve leaks	Clean or replace it
	The oil cylinder is not tightened	Replace the seal
Lowering too slow	The hydraulic oil is dirty	Change the oil
	The oil hose jammed	Replace it
	Lowering restrictive valve is turned too low	Turn lowering restrictive valve up
Safety lock cannot be opened	The air pressure regulating valve is closed or too low	Adjust air pressure to 5kg/cm ²
	The Solenoid air valve is damaged	Replace it

MAINTENANCE

Easy and low cost routine maintenance can ensure the lift work normally and safely. You may choose the frequency of routine maintenance by consulting your lift's working conditions and time.

The following parts need to be lubricated:



6.1 Daily checking items before operation

The user must perform daily check. Daily check of safety system is very important – the discovery of device failure before action could save your time and prevent you from great loss, injury or casualty.

- This machine should be constantly wiped and clean up ,and keep it clean. Before wiping, cut the power, ensure security.
- Check whether oil hose well connected. No leakage is allowed.
- Check the electric connections. Make sure all connections are in good condition.
- Check if safety teeth and safety block matched well or not.

6.2 Weekly checking items

- Check the flexibility of moving parts, and lubricate all pivot pins.
- Check whether the expansion bolts well anchored.
- Check the working conditions of safety parts.
- Check the amount of oil left in the oil tank. Oil is enough if the carriage can be raised to highest position. Otherwise, oil is insufficient.

6.3 Monthly checking items

- Check whether the expansion bolts well anchored.
- Check the tightness of the hydraulic system and screw firm the joints if it leaks.
- Check the lubrication and abrasion circumstance of moving parts.

6.4 Yearly checking items

- Check the lubrication and abrasion circumstance of moving parts.
- Empty the oil tank and check the quality of hydraulic oil.
- Wash and clean the oil filter.

6.5 Every three years or more than 5,000 routine maintenance items

- Replace the pin, bearings, tubing connector components.

ATTENTION: Strict maintenance of the machine according to the above requirements, the machine will keep work normally, and prevent accidents occurring to a large extent at the same time.

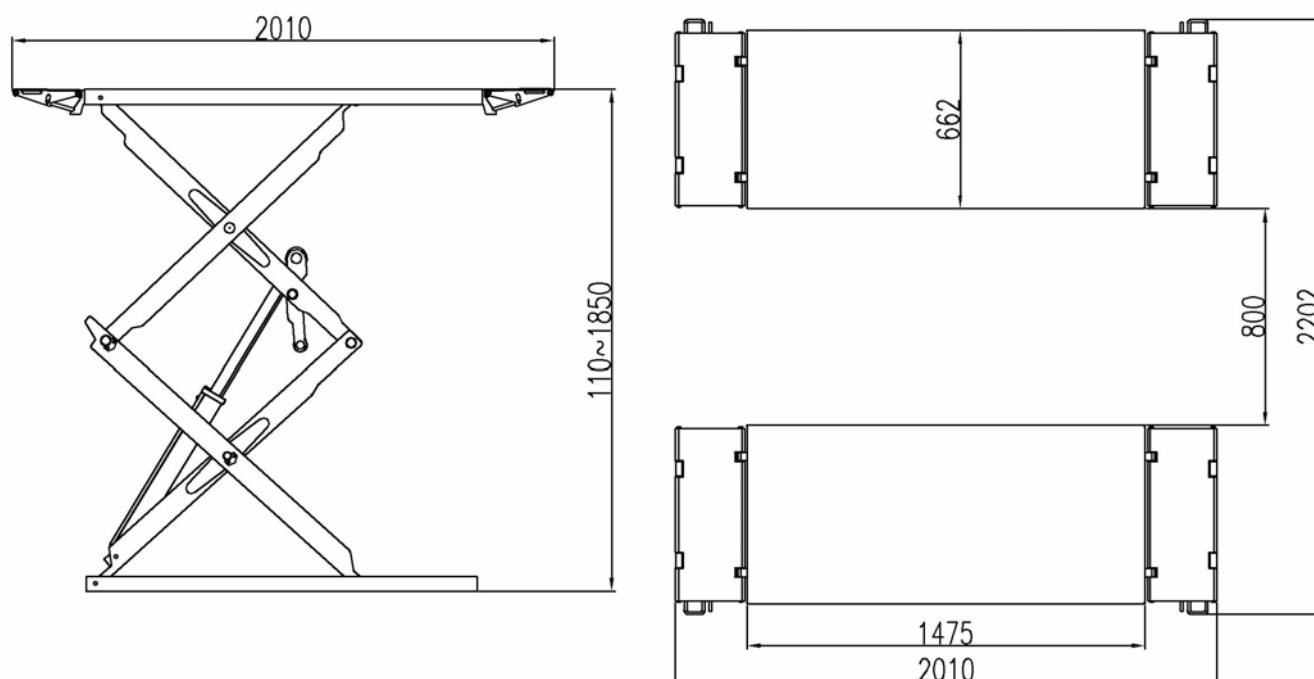
Annex

Annex 1, Packing List of the whole lift

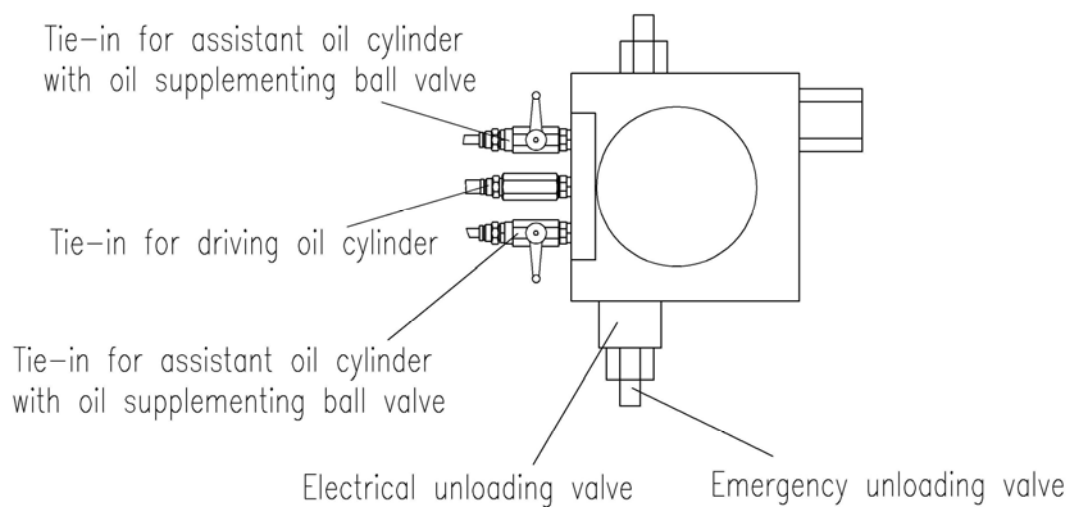
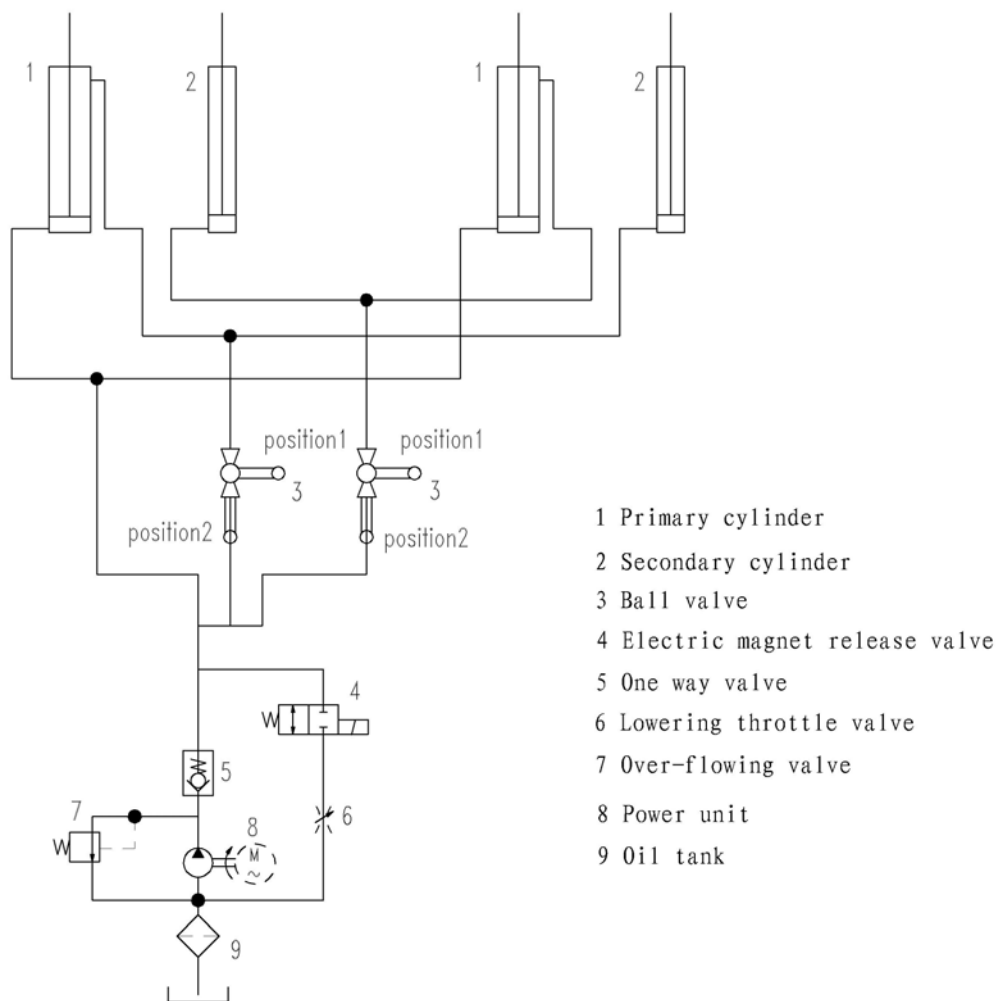
- 1# platform 1
- 2# platform 2
- 3# packaging wooden box of electric parts (including the following parts)

S/N	Name	Spec	Qty	note
1	The control box	QJYJ30-CB.8	1	Motor, hydraulic oil tank, pneumatic electromagnetic reversing valve, oil-water separator
2	Expansion bolt	M16*140	8	Packed in one
3	Plastic expansion tubes	M8*30	8	
4	Semi-sphere head tapping screws	ST5*30	8	
5	Connecting tubing		3	#1tube length 1480mm, #2tube length 1400mm, #3tube length 1325mm
6	Chief oil hose	QJYJ30-CB.6-07	1	Length 3070mm
7	Deputy oil hose	QJYJ30-CB.6-08	2	Length 3380mm
8	Tubing cover	QJYJ30-CB.6-21	2	
9	Thin rubber mat	QJY4040.8-07	4	
10	File		1	Including user's manual and certificate of approval
11	Air hose	PU0604	1	Length 1400mm

Annex2, Overall diagram

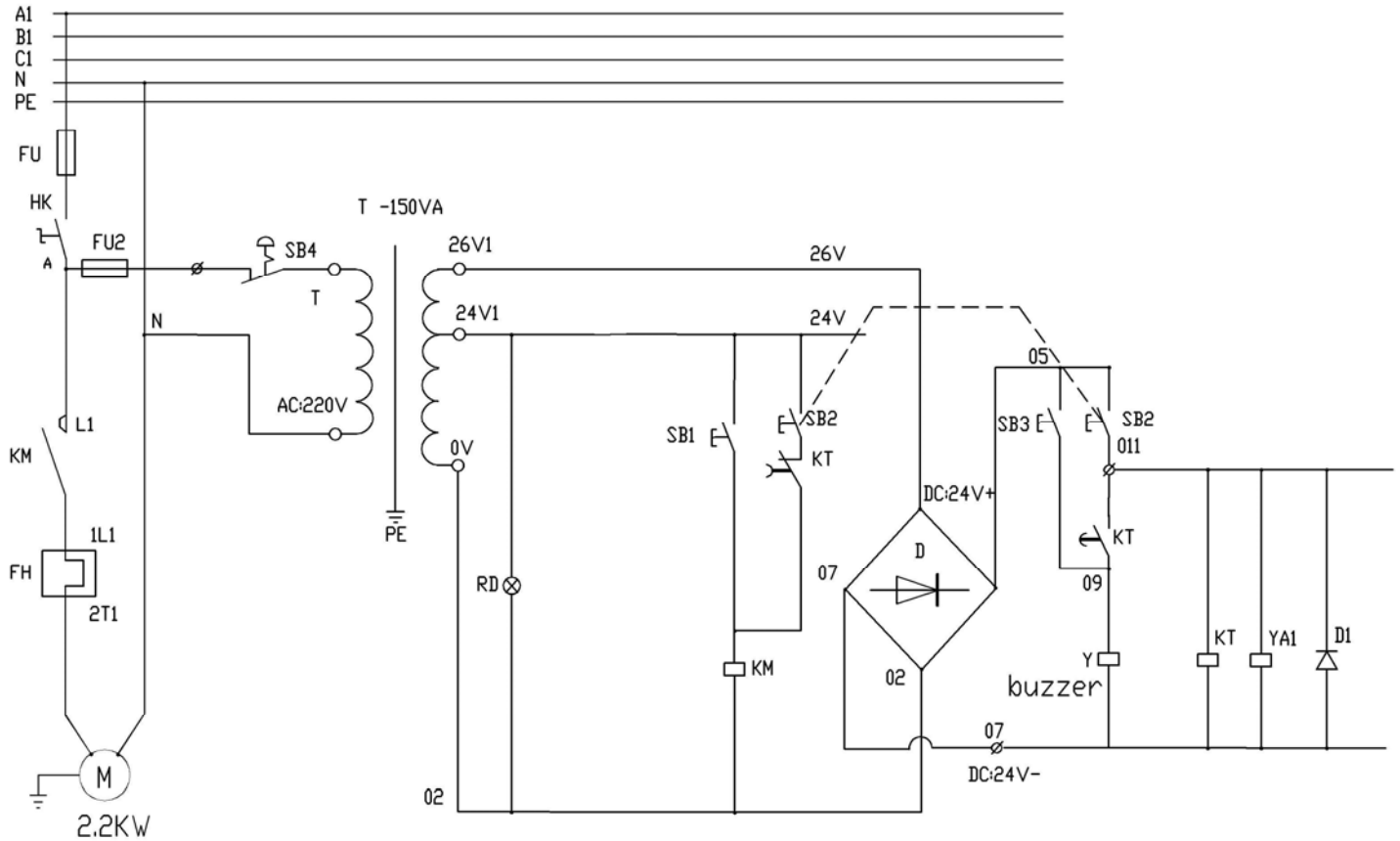


Annex 3, Hydraulic working system



Annex4, Wiring diagram

Single-phase (220V)



SB1~3--button

KM--contactor B16 AC: 24V

T--transformers

AC: 220V/24V-26V

RD--lights

D--bridge rectifiers

D1--1N5408 Freewheeling diode

Y, YA1~YA4--electromagnet

M--motor 2.2KW

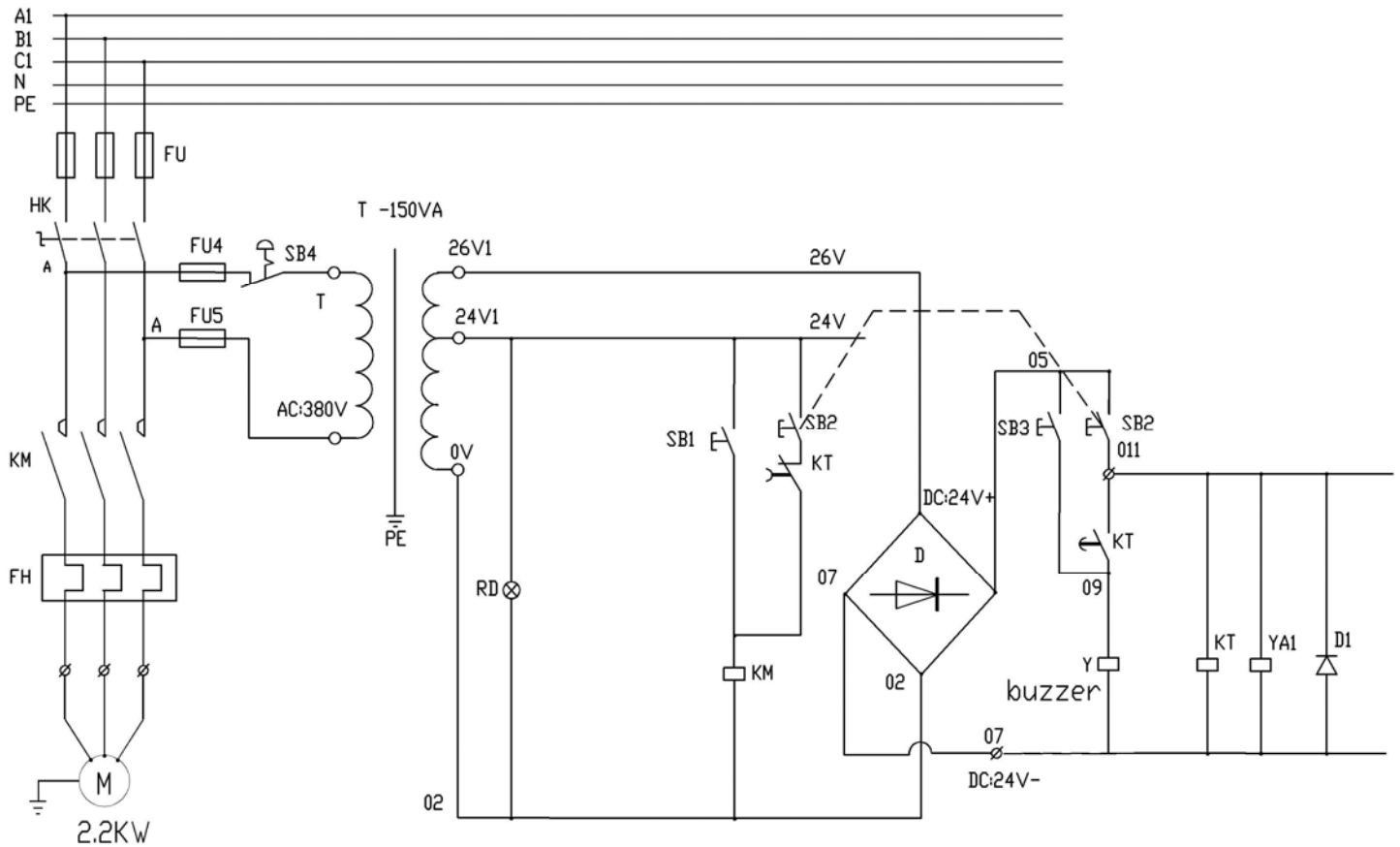
HK--YMW26-20/3

SB4--STOP button

KT-DC: 24V time relay

KA-AC: 24V relay

Three-phase (380V)



SB1~3--button

KM—contavtor B16 AC:24V

T-transformers

AC: 380V/24V-26V

RD--lights

D—bridge rectifiers

D1—1N5408 Freewheeling diode

Y, YA1~YA4--electromagnet

M--moator 2.2KW

FH--T16 7.5-11A

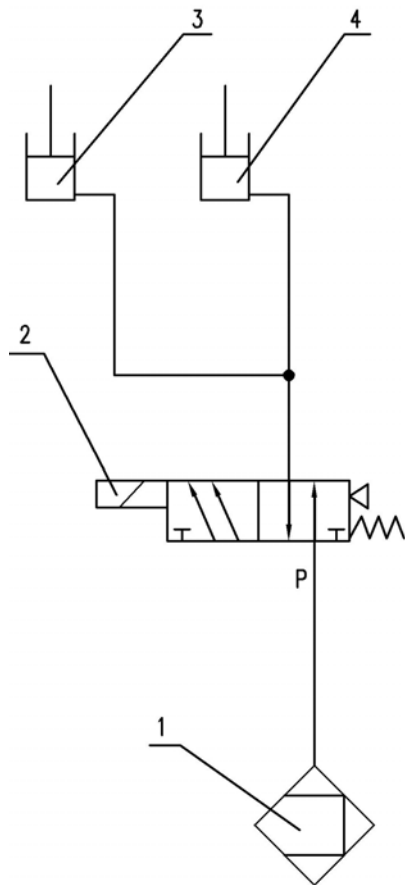
HK--YMW26-20/3

SB4--STOP button

KT-DC: 24V time relay



KA-AC: 24V relay








Annex5, Diagram for air supply connection








- 1.Air cleaner
- 2.Solenoid Directional Valve
- 3.Driving cylinder locking
- 4.Assistant cylinder locking

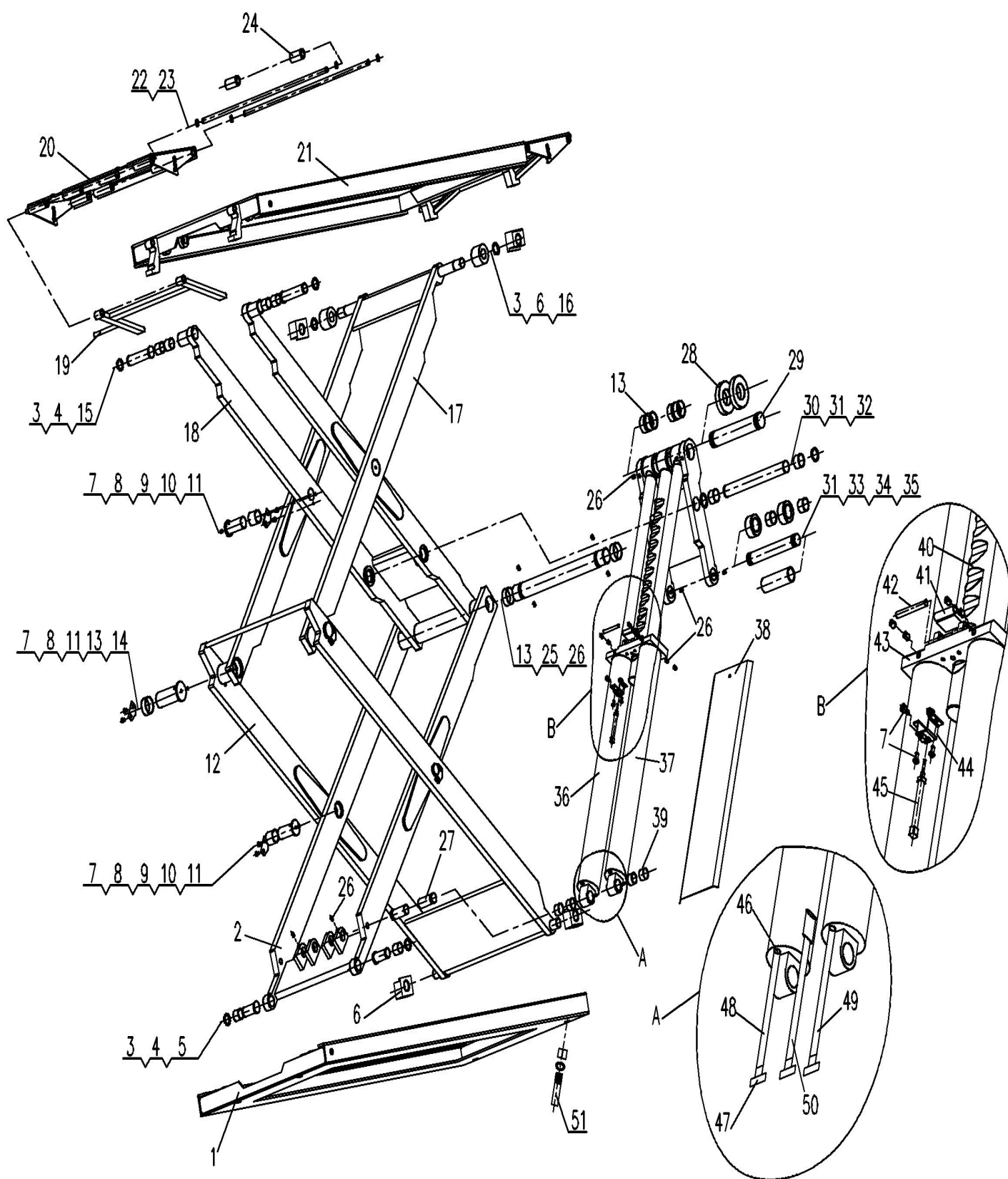
Annex 7, Spare parts list

S/N	Name	Spec	Unit	Qty/ set	Pictures
1	Power switch	YMW26-20/2GS	Pcs	1	
2	Button	LA135-11/20A3(W)	Pcs	1	
3	Button	LA135-20/20A3(W)	Pcs	2	Same outlook as item2

S/N	Name	Spec	Unit	Qty/set	Pictures
4	Alarm lamp	AD115-22/21-DM AC/DC 24V (R)	Pcs	1	
5	Power indicator	AD115-22/1-A7 AC/DC 24V (G)	Pcs	1	
6	transformer	BK40 40VA AC380V-AC24V BK40 40VA AC220V-AC24V	Pcs	1	
7	AC contactor	TRC2-12/AC 24V-10	Pcs	1	
8	Circuit breaker	TRH1-63 3P/C16A	Pcs	1	
9	Circuit breaker	TRH1-63 1P/C3A	Pcs	1	
10	Circuit breaker	TRH1-63 1P/C1A	Pcs	1	Same outlook as item9
11	Emergency stop button	LA135-01MXS/20B9 (R)	Pcs	1	

S/N	Name	Spec	Unit	Qty/s et	Pictures
12	Bridge rectifier	QL-3510	Pcs	1	
13	Capacitance	4700uF 50V	Pcs	1	
14	Relay	MY2N-J 24VDC	Pcs	1	
15	Relay seat		Pcs	1	
16	Pneumatic valve	3V210-08	Pcs	1	

Annex 7, Separated drawings for the lift



Product exploded diagram list

S/N	Drawing no.	Name	Qty
1	QJYJ30-CB.1	The base components	2
2	QJYJ30-CB.2.2	bottom rod	2
3	GB894.1	Shaft Retaining rings 25	12
4	SF-2	bushing 2525	12
5	QJYJ30-CB-03	The base fixed axis	4
6	QJYJ30-CB.2-03	Nylon slider	8
7	GB70.2	Hexagon flat head screws M6X10	22
8	QJYJ30-CB.2-06	middle axial fixed cushion	12
9	SF-2	bushing 3035	8
10	QJYJ30-CB.2-02	Middle axis	8
11	GB1155	Oil cup $\Phi 6$	12
12	QJYJ30-CB.2.1	Bottom slider	2
13	SF-2	bushing 4020	16
14	QJYJ30-CB.2-01	Slider fixed axis	4
15	QJYJ30-CB-01	Platform fixed axis	4
16	QJYJ30-CB.2-04	Nylon pulley	4
17	QJYJ30-CB.2.3	Upper slider	2
18	QJYJ30-CB.2.2	Bottom rod	2
19	QJYJ30-CB.3.2	Support bar	4
20	QJYJ30-CB.3.3	Extension plate	4
21	QJYJ30-CB.3.1	Platform Panel	2
22	GB894.1	Shaft Retaining rings 12	16
23	QJYJ30-CB.3-02	Extension plate fixed axis	8
24	QJYJ30-CB.3-01	Extension plate roller	8
25	QJYJ30-CB.2-05	Rod fixed axis	2
26	GB77	Hexagon flat - End Set screws M8X10	26
27	QJYJ30-CB-02	Oil cylinder fixed axis	4
28	QJYJ30-CB-06	Pulley 1	4
29	QJYJ30-CB-05	Oil cylinder connecting shaft	2
30	GB894.1	Shaft Retaining rings 30	4
31	SF-2	bushing 3025	8
32	QJYJ30-CB-04	Connection plate fixed axis	2
33	QJYJ30-CB.5-03	Pulley 2	4
34	QJYJ30-CB.5-01	Connection plate connecting shaft	2
35	QJYJ30-CB.5-02	Connection plate collar	2
36	QJYJ30-CB.6-11	main oil cylinder	2
37	QJYJ30-CB.6-12	Secondary oil cylinder	2
38	QJYJ30-CB.6-13	Cover plate	2
39	SF-2	bushing 2520	8
40	QJYJ30-CB.6.1	Safety bar parts	2

S/N	Drawing no.	Name	Qty
41	QJYJ30-CB.6.2	Safety lock tongue parts	2
42	QJYJ30-CB.6-20	The lock tongue fixed shaft	2
43	QJYJ30-CB.6.3	Oil cylinder connecting plate	2
44	QJYJ30-CB.7.1	Cylinder block parts	2
45	QJYJ30-CB.7-01	Air cylinder	2
46	QJYJ30-CB.6-16	oil tubing connector	8
47	QJY245DS.8-06	Three way pipe joint	3
48	QJYJ30-CB.6-06	Oil cylinder tubing 3	2
49	QJYJ30-CB.6-05	Oil cylinder tubing 2	2
50	QJYJ30-CB.6-04	Oil cylinder tubing 1	2
51	QJY4040-14	Expansion bolt M16X140	8

The company is committed to constantly improving the product quality, update technology specifications, they are subject to change without notice.